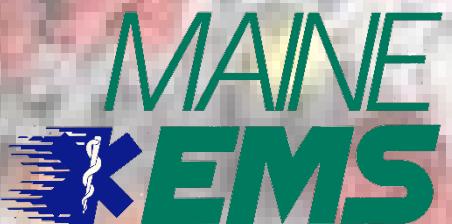


Early Response to COVID-19 Outbreaks within Fire and EMS Agencies Playbook

Government of the State of Maine

October 8, 2020



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Letter from the Directors of Maine EMS and Maine CDC

September 28, 2020

On behalf of Maine Emergency Medical Services (Maine EMS) and Maine Center for Disease Control and Prevention (Maine CDC), we would like to extend our sincere thanks to all the countless frontline healthcare professionals and first responders who continue to work tirelessly as part of the ongoing response to this ongoing pandemic. While the pandemic continues to function as a sea of uncertainty, we are confident that by working together we are stronger.

The hard work of EMS clinicians, dispatchers, fire fighters, police officers, and other first responders throughout the state is clearly evident and our number of cases continues to reflect the efficacy of our system. Maine EMS has worked closely with the Maine CDC since the earliest stages of this pandemic in February and we anticipate continuing this partnership into the future past this pandemic.

Maine EMS and Maine CDC decided to assemble this COVID-19 playbook shortly after the events that occurred in York County related to multiple EMS agencies that had individuals who were positive with COVID-19. Prior to this point in time, Maine EMS and Maine CDC had been working individually with each organization; however, it made sense to write down some more concrete guidance on how to move forward.

It is our pleasure to present to you the guidance document that we have developed. It must be noted that this is a working document and there will invariably be changes and exceptions as we certainly cannot think through every variable. We strongly encourage you to consider any questions or concerns you may have and address them to Maine EMS so we can provide as much information as possible to enable you to handle a positive case or an outbreak should your agency be confronted with this.

As always, please reach out to Maine EMS (maine.ems@maine.gov or (207) 626-3860) if you have any additional questions, comments, or concerns.

Thank you,

J. Sam Hurley, MPH, EMPS, NRP
Director, Maine EMS



J. Sam Hurley
Director of Maine EMS



Dr. Nirav Shah
Director of Maine CDC

Purpose of the Playbook

The goal of the Playbook for Early Response to COVID-19 Outbreaks within Fire and EMS Agencies (Playbook) is to assist fire and EMS agency leadership in coordinating the initial local response to a case and/or outbreak of COVID-19 cases at their agency. It is intended to highlight key steps that should be taken initially and moving forward to ensure that the impact of the virus is minimized as much as possible. This document is not designed to supersede Maine EMS, Maine CDC, or United States Centers for Disease Control and Prevention (U.S. CDC) guidance but is designed to offer EMS and fire leadership insight into the most likely initial steps in a response to an outbreak at their department. The playbook is broken into several sections: Understanding COVID-19 and Outbreak Prevention, Initial Response – Day One, and Continued Response – Moving Forward, Contingencies, and finally an Appendix.

Understanding COVID-19 and Outbreak Prevention

This section will go into some detail regarding the epidemiology surrounding COVID-19 based on currently available information provided by the U.S. CDC on their website.

Studying the Disease¹

U.S. CDC and other agencies and institutions around the world are conducting thousands of epidemiological studies to learn more about COVID-19 and the virus that causes it. These studies help us understand:

- The time between when someone is exposed to the virus and when they have symptoms (incubation period). We now know that someone can be infected with the virus for 2–14 days before they feel sick, and that some people never feel sick.
- How long a person who is infected can shed (release from their body) the virus. To avoid spreading infection, we recommend that people infected with the virus avoid being around others. Individuals with symptoms should remain isolated until they have gone 24 hours without fever and a fever-reducing medication, their symptoms have improved, and 10 days have passed since their symptoms started. Individuals who do not have symptoms should remain isolated until 10 days after the positive specimen was collected.

¹ U.S. CDC. Studying the Disease. (July 1, 2020) Accessed on August 31, 2020 from <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/about-epidemiology/studying-the-disease.html>

- The range of signs, symptoms, and severity of the disease (spectrum of disease). Knowing this information helps people be on the lookout for early symptoms and helps healthcare professionals diagnose and treat the disease.
- The risk factors associated with severe disease. We now know that people who are older or who have serious chronic health conditions (e.g., cancer, chronic kidney disease, COPD, immunocompromised state, obesity, heart conditions, sickle cell disease, type two diabetes mellitus, etc.) are at higher risk for becoming very sick from COVID-19.
- How often the disease causes illness and death in a population (morbidity and mortality rate). This information helps epidemiologists understand the impact of COVID-19 on public health.

Cohort Studies

A cohort study is one that keeps track of a group of people (cohort) over time. If the information has already been collected for other purposes, it is a retrospective cohort study.

For example, U.S. CDC scientists who studied demographic characteristics of people in Georgia who were hospitalized with COVID-19 found that the percentage of hospitalized patients who were black was higher than the percentage of hospitalized patients in the overall population. These results help public health professionals prioritize COVID-19 prevention strategies for people who might be at increased risk for severe disease by prioritizing funds, tests and additional research in those communities and developing specific clinical guidelines based on differences in resources to slow the spread in these communities.

In a prospective cohort study, the data collection begins when a cohort is formed, and the data are collected from that group going forward. Current COVID-19 prospective studies are looking at:

- severity of illness and risk factors for severe disease,
- knowledge, attitudes, and practices of a specific population (such as pregnant people or people with underlying medical conditions),
- use of certain medicines, and
- infection prevention and control practices.

Serology Surveys

People who have been infected with a virus might develop antibodies (which are proteins in blood that fight the virus) even if they don't know they are infected. Serologic tests may be used to detect the antibodies. By counting the number of people with antibodies to COVID-19, scientists may learn how much the disease has spread in a population. Antibody tests may be

useful because they may include infections that might have been missed because people had no symptoms (were asymptomatic) or mild symptoms and therefore did not get tested or receive medical care. It is important to note the following regarding serologic tests:

- They are not a marker of current infection (i.e., someone may present with a positive serological result but a negative PCR test result because they no longer are shedding the virus but have built antibodies against the virus itself which are detected by the serologic testing);
- Due to concerns regarding sensitivity with tests on the market, it may or may not actually reflect whether individuals have had SARS-CoV-2; and
- Data from antibody/serological testing is novel and interpretation is difficult, if not impossible, at this time.

Antibody tests are used by public health specialists to potentially help answer other important questions about how COVID-19 infections are progressing through populations over time and help estimate how much of the population has not yet been infected, helping public health officials plan for healthcare needs.

U.S. CDC's COVID-19 seroprevalence surveys include large-scale geographic surveys, community-level surveys, and surveys focusing on specific populations.

Identifying the Outbreak Source²

The novel (new) coronavirus that first appeared in China had never been seen before, so it quickly gained the attention of scientists around the world.

Epidemiologists did field investigations to find out how the new virus started. They conducted surveys in the community and in health facilities and collected nose and throat specimens for lab analyses. These investigations showed them who was infected, when they became sick, and where they had been just before they got sick.

Using this information, epidemiologists determined that the virus possibly came from an animal sold at a market. The new virus was found to be a coronavirus, and coronaviruses cause a severe acute respiratory syndrome. This new coronavirus is similar to SARS-CoV, so it was named SARS-CoV-2. The disease caused by the SARS-CoV-2 virus was named COVID-19 (COronVIrusDisease-2019) to show that it was discovered in 2019.

² U.S. CDC. Identifying the Outbreak Source. (July 1, 2020) Accessed on August 31, 2020 from <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/about-epidemiology/identifying-source-outbreak.html>

An outbreak is called an epidemic when there is a sudden increase in cases. As COVID-19 began spreading in Wuhan, China, it became an epidemic. Because the disease then spread across several countries and affected a large number of people, it was classified as a pandemic.

Monitoring the Disease³

Defining Cases

As the virus that causes COVID-19 began to spread from person to person in communities (community transmission), scientists needed to track the disease and try to slow its spread. To do so, they needed a common definition for a case of COVID-19. Having a case definition helps to make sure cases are counted the same way everywhere. In the United States, a confirmed case of COVID-19 is defined as a person who tests positive for the virus that causes COVID-19.

COVID-19 became a nationally notifiable disease, meaning that health departments are required to report cases of COVID-19. Systems like the National Notifiable Diseases Surveillance System (NNDSS) collect and send data on cases of COVID-19 to U.S. CDC. This helps the agency monitor trends in cases within states and across the country.

Collecting Information About Cases

As cases of COVID-19 are being reported, epidemiologists are conducting public health surveillance, which is the systematic collection, analysis, and interpretation of health data. Surveillance allows epidemiologists to calculate:

- Incidence (number of new cases reported over a specific period of time).
- Prevalence (number of cases at one specific point in time).
- Hospitalizations (number of cases resulting in hospitalization).
- Deaths (number of cases resulting in death).

But surveillance isn't just about counting cases. All kinds of information can be collected to learn more about the disease.

Collecting data from medical records (chart abstractions) can tell us more about patients infected with COVID-19 and the course of their disease. These data might include demographic information (age, race/ethnicity, sex), as well as symptoms, treatments, and health outcomes. Scientists can use chart abstractions to learn who is more likely to become severely ill, what medical care patients have received, and if patients have recovered.

³ U.S. CDC. Monitoring the Disease. (July 1, 2020) Accessed on August 31, 2020 from <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/about-epidemiology/monitoring-and-tracking.html>

Reporting Cases

Once scientists collect and analyze the data, experts in data visualization help to create pictures, charts, and graphics to make the information easier to understand and use. This information is not only helpful for scientists working to understand the information but also for the public.

Displays of epidemiological data often include an epidemic (epi) curve. An epi curve is a graph that shows the number of cases, hospitalizations, or deaths (y-axis), over time (x-axis). Epi curves for COVID-19 are updated constantly as new data become available.

Because there is a delay between when someone gets sick and when that person's case is reported, it can be hard to determine when the number of cases actually start to decline. An epi curve for the most recent few weeks might look like an outbreak is ending even when it is still active. The full shape of the curve is only clear after the outbreak is over.

Tracing Contacts

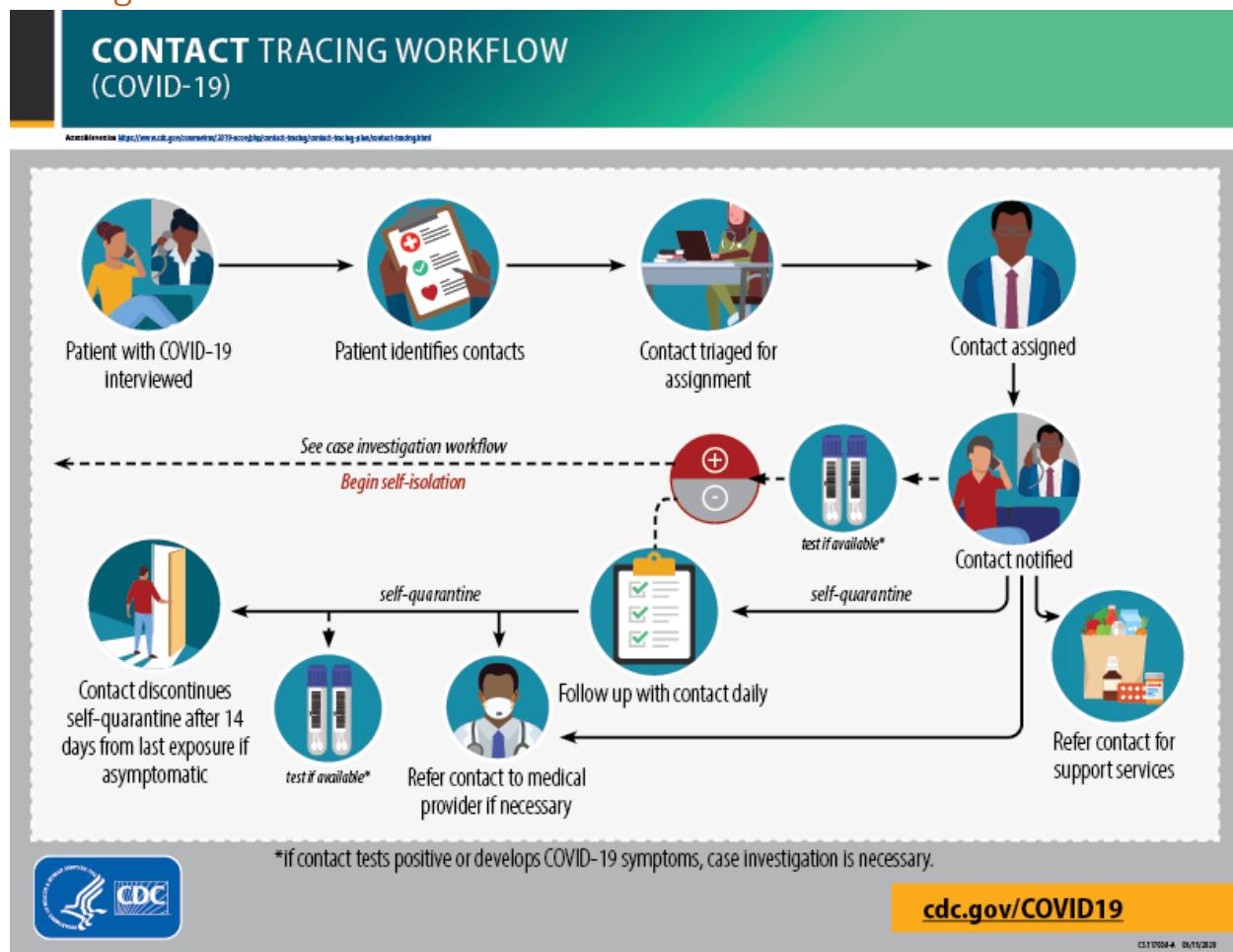


Figure 1 COVID-19 Contact Tracing Workflow (Source: U.S. CDC)

Scientists and public health workers are also working to stop the spread of COVID-19 through contact tracing. In this strategy, public health workers talk to people with COVID-19 to learn about all the people they were physically close to while they were potentially able to spread the disease. Those people are their contacts. Maine CDC is particularly focused on identifying individuals who would be defined as close contacts or persons whom the positive COVID-19 individual interacted with closer than six (6) feet for at least 15 minutes. With this information, scientists can follow the chain of infection to understand how the disease might have spread from person to person. Contact tracing is used to prevent and control many other infectious diseases, such as tuberculosis and HIV.

Using the information learned through contact tracing, epidemiologists develop tables, called line lists, summarizing the data about the contacts. The connection between each person is called an epidemiological (epi) link.

Contacts of people with COVID-19 are at risk for developing the disease and spreading it to others.

Public health workers reach out to these people at risk to tell them they have had contact with someone with COVID-19 and because of this exposure, they might get sick. They recommend prevention measures that contacts should follow, including self-quarantine (staying away from others while monitoring themselves for signs of illness), handwashing, and the use of cloth face coverings.

Contact tracing has helped slow the spread of other epidemics, including Ebola and SARS, and is crucial in slowing the spread of COVID-19.

Impact of Disease

A key role of epidemiologists during the COVID-19 pandemic is to estimate the burden of disease: the impact of a disease or other health outcome on a population. As scientists collect data from the COVID-19 studies, they are analyzing these data to estimate key outcomes, such as the number of infections, illnesses, medical visits, hospitalizations, and deaths.

Outbreak Prevention⁴

The following steps are broken out based on steps that EMS clinicians and other staff can take as well as steps that agency leadership can take to mitigate outbreaks within the department or agency.

⁴ U.S. CDC. Firefighters & EMS Providers. (April 17, 2020). Accessed on August 31, 2020 from <https://www.cdc.gov/coronavirus/2019-ncov/community/organizations/firefighter-EMS.html>

Action Items for EMS clinicians, Firefighters and Other First Responders

- EMS clinicians, firefighters and other first responders must not work if they are sick. If they develop a fever or symptoms, such as cough or shortness of breath, have them call their healthcare provider for medical advice and guidance before visiting their office. They must follow Maine EMS's return-to-work guidance after recovering from the illness.
- Advise them to contact their supervisor and occupational health program immediately if they are exposed to a patient with suspected or confirmed COVID-19 when they were not wearing recommended personal protective equipment (PPE). They should also complete any occupational exposure report forms required by their organization.
- If they are permitted to continue working because they are asymptomatic and have a negative test result, they must take additional precautions, including wearing a facemask at all times and monitoring for symptoms and fever for 14 days after they were exposed to the patient.
- They must wear at least a surgical mask, gloves, and eye protection for all calls; however, during patient interactions where COVID-19 is suspected or confirmed, and an aerosol-generating procedure is performed, the patient is in cardiac arrest, or the patient is non-compliant with universal masking, they must wear the following PPE:
 - Fit tested NIOSH-approved N95 or higher-level respirator. If using an N95 device that has an exhalation port, additional actions must be taken to provide source control (preventing infection spread of infection to others) consistent with current state and federal guidelines (e.g., covering the exhalation port with a surgical mask or another filter)
 - If a respirator is used, they must ensure that they can maintain an adequate seal. This may require them to be clean-shaven because facial hair can cause respirators to leak around the face seal.
 - A single pair of disposable examination gloves
 - Eye protection, such as face shield or goggles, unless they are wearing a full-face respirator
 - Gown or coveralls
 - If their PPE becomes grossly contaminated or compromised (e.g., torn), discard and replace their PPE in accordance with the policies and procedures of the organization.
 - Follow CDC guidance if they are reusing, reprocessing, and storing PPE.
- Have patients wear facemasks or cloth face coverings for source control, if they can tolerate it.
- Limit the number of individuals in the patient compartment to minimize possible exposures.

- Use EPA-registered hospital-grade disinfectants to disinfect non-porous surfaces of ambulances, gurneys, clipboards, radios, and other frequently touched surfaces or equipment according to the manufacturer's recommendations. Non-porous surfaces of PPE such as powered air-purifying respirators (PAPRs) should be cleaned and disinfected in accordance with the manufacturer's recommendation.
- Launder reusable personal protective clothing (e.g., uniforms) or other porous materials according to the manufacturer's recommendations if they become contaminated.
- Use alcohol-based hand sanitizers with greater than 60% ethanol or 70% isopropanol, or wash hands with soap and water for at least 20 seconds when soap and water are available. Strongly encourage them to avoid touching their eyes, nose, and mouth.
- Remain diligent in maintaining physical distance between colleagues and patients, where possible.
- Remain diligent with regular hand washing and maintaining good respiratory hygiene.
- Always wear surgical mask or face covering and eye protection, if requested, when not in private quarters while at work. This will mitigate the risk of removing multiple EMS clinicians, firefighters and other first responders from service should an individual contract COVID-19.
- Utilize the confidential Maine FrontLine WarmLine by calling (207) 221-8196 or texting "Frontline" to 898-211, the regional CISM teams, or the Maine EMS – "Stay Healthy in EMS" webpage as resources to increase overall health, maintain resiliency, and manage stress.

Action Items for Agency/Department Leadership

- Develop and share a COVID-19 health and safety plan to protect EMS clinicians, firefighters and other first responders.
- Continue conducting daily symptom checks with all employees to more rapidly identify those with signs and/or symptoms consistent with the disease.
- Encourage physical distancing when possible between members of the agency/department.
- Educate and encourage employees to maintain good hand and respiratory hygiene practices to help prevent the spread of the virus.
- Deliver up-to-date safety messaging on the current status of resources and protocols.
- Use National Incident Management System (NIMS) forms to document protective actions.
- Actively encourage sick employees to stay home. Employees (EMS clinicians, firefighters and other first responders) must not return to work until the criteria to discontinue home isolation are met, in consultation with healthcare workers, Maine EMS, and Maine CDC, as necessary. Sick leave policies should be flexible and non-punitive.

- Fit test personnel for appropriate respirators. Train them on proper donning, doffing, and maintenance of all PPE. All PPE should be accessible to responders when needed and available.
- Work collaboratively with local and county Emergency Management Agencies in the event additional PPE is needed and cannot be sourced through traditional supply chain channels.
- During pre-hospital care, take steps for universal source control for anyone (e.g., EMS clinicians, patients, family members), regardless of whether they have symptoms:
 - Cloth face coverings are not considered PPE but can be used for source control.
 - N95 respirators should be reserved for EMS clinicians, firefighters and other first responders.
- Follow Maine EMS and Maine CDC guidance for when employees can return to work:
 - following potential exposure to patients with COVID-19
 - after being diagnosed with confirmed or suspected COVID-19
- Designate a person to be responsible for addressing employees COVID-19 concerns.
- Ensure all staff are aware of the confidential Maine FrontLine Warmline [(207) 221-8196], regional CISM teams, and the Maine EMS – “Stay Healthy in EMS” webpage as resources to help improve resiliency and to manage stress.
- Develop policy requiring staff to always wear a surgical mask or face covering when not in private quarters while at work. Some services operating in areas with significant community spread may also add eye protection to help mitigate the spread within the department. This will reduce the risk of removing multiple EMS clinicians, firefighters and other first responders from service should an individual contract COVID-19.

Initial Response

The following guidance is designed to provide a strategy for how to manage the initial response to a COVID-19 case or suspected case at your EMS agency or fire department.

Identification of a Suspected or Positive COVID-19 Case(s)

Services leaders may become aware of positive cases through a variety of routes. It is important to understand the first steps that the service leader should take in each situation.

All healthcare workers, including non-EMS licensed first responders, should remain diligent about self-monitoring for signs and symptoms consistent with COVID-19. It is recommended that all EMS clinicians, firefighters and other first responders monitor themselves at least once daily for the onset of signs and/or symptoms. EMS clinicians, firefighters and other first responders should keep themselves informed with the U.S. CDC's most current list of possible signs and symptoms.

Individual Reports Symptoms to Supervisor Prior to Reporting to Work

- Do not allow the symptomatic individual to report to work or respond on any incidents. Send them to their primary care provider, local clinic, occupational health service, or available COVID-19 swabbing site to be tested as quickly as possible.

Continue to “[In All Cases](#)” section below.

Individual Reports Symptoms to Supervisor While at Work

- Immediately remove the symptomatic individual from service and send them to their primary care provider, local clinic, occupational health service, or available COVID-19 swabbing site to be tested as quickly as possible.

Continue to “[In All Cases](#)” section below.

Individual Is Tested Independently and Reports a Positive Result

- Some EMS clinicians, firefighters and other first responders may choose to seek testing independently or through some administrative means (e.g., elective surgical procedure or returning from out-of-state travel).
- Immediately remove the symptomatic individual from service, if on shift. If not on shift, do not allow the symptomatic individual to report to work or respond on any incidents.
- Identify the date in which the individual was tested for COVID-19, where they were tested, the method by which they were tested (e.g., antibody (Abbott ID Now) or viral testing (nasal swab)).

Continue to “[In All Cases](#)” section below.

In All Cases

- Individuals who are experiencing signs and/or symptoms consistent with a medical emergency should be treated appropriately by the EMS service and/or referred to the nearest emergency department for further evaluation.
- They must immediately begin isolation at their home or another site where they can safely self-isolate. Their family, whom are presumably close contacts (within six (6) feet for at least 15 minutes or more), should also enter quarantine pending results from the swabbing test of the individual who is symptomatic. For those that are asymptomatic but have a positive COVID-19 test result, their families should also enter quarantine and follow Maine CDC recommendations issued by the contact tracer involved with the case.
- Determine the exact date that the individual began experiencing signs and/or symptoms (e.g., they lost some of their taste yesterday but developed a cough today).

- Determine the last time that the individual was on site of the agency/department or interacting with other members of the agency/department's staff or the community.
 - If the individual has been in close (within six (6) feet) prolonged (15 minutes or more) contact with other co-workers within 48 hours prior to the onset of symptoms and did not worn appropriate PPE, those persons are considered direct contacts/exposures. Universal masking procedures within the agency/department of at least a surgical mask and eye protection are recommended even when not interacting with patients. This will help prevent staff from being removed from service in the event someone becomes symptomatic. The co-workers considered direct contacts/exposures should be removed from service immediately and placed into quarantine until the results of the symptomatic individual come back negative or they complete the 14-day quarantine. If the symptomatic individual(s) is identified as positive, their close contacts should remain in quarantine for 14 days following the last known contact with the positive individual.
 - Compile a list of all of the symptomatic individual's known contacts and a working contact number, the Maine CDC Contact Tracing team will reach out to them individually as part of their tracing process.
 - Determine if the individual had been involved in patient care during this time, build a list of those patients. Maine EMS has developed a shared report within the MEFIRS report writer tool that easily exports the necessary information. You can access that report by going to *Report Writer* and searching for "Clinical Contact Tracing." For incident date, you should enter the date 48 hours prior to the first reported signs and/or symptoms (for instance, if symptoms began on Thurs., Sept. 3, 2020, enter 09/01/2020 as the date). The Crew Member ID corresponds to the individuals Maine EMS License Number (License numbers can be looked up on the [Maine EMS Public Lookup](#)).
 - Determine if the individual has participated in any community events, gatherings, or volunteer activities within the community within the 48-hour window prior to onset of first symptoms. This includes church attendance, school events, and other gatherings where the individual may be in contact with others within six (6) feet.
 - Determine if those involved work at other EMS agencies or departments.
- Notify Maine CDC and Maine EMS via the Maine CDC EMS Clinician and Dispatcher COVID-19 Reporting Tool ([Maine EMS Operational Bulletin No. 2020-04-23-01](#)) within 24 hours. These reports can be submitted securely through the electronic portal: <https://gateway.maine.gov/redcap/surveys/?s=PMRK4MKDRC>. You will need the following information to make the notification:

- The identity of the EMS service organization or Emergency Medical Dispatch Center (EMDC);
 - License number of the EMS clinician or emergency medical dispatcher (EMD) for the individual involved; and
 - Date of removal from the EMS or EMD workforce.
- Assess current supplies of PPE and ensure that the agency does not need additional equipment. Reach out to your existing supply chain resources initially; however, do not hesitate to engage the State's stockpile, if necessary. To do so, reach out to the local emergency management agency to initiate a request.
- Connect with local municipal leadership (e.g., Mayor, Select Board) to make sure they are aware of the situation, as needed.
- Engage the agency/municipality/county public information officer to work collaboratively with Maine CDC and Maine EMS to address media inquiries regarding the potential case. It is important to be able to address this internally and externally within the community.
- Consider engaging the confidential Maine FrontLine WarmLine (via the primary line (207) 221-8196 or through Dr. Laurie Cyr-Martel at (207) 240-8913) and/or Regional EMS Offices to arrange for additional support for the overall health of EMS clinicians, firefighters and other first responders including outreach where they can provide strategies to increase resiliency and navigate stress. The goal is to establish relationships that facilitate more effective prevention, protection, mitigation, response, and recover when the unexpected occurs.
- If your agency is not authorized to conduct COVID-19 swabbing, reach out to local healthcare partners (e.g., EMS agencies authorized to conduct swabbing, home health nursing staff, local hospital) to check their availability to conduct universal swabbing within your agency. Compile a list and count of all of the individuals working within your agency that you intend on getting swabbed. Do not conduct the swabbing unless the specimen from the individual in question comes back as positive. Maine EMS and Maine CDC can facilitate these conversations and can assist the agency in making these arrangements.
- Write down any questions for Maine CDC and/or Maine EMS. If there are questions, don't hesitate to reach out to Maine EMS directly at 207.626.3860 or the Director's direct line at 207.620.6698.

After Receiving Results

If the results are positive:

- Submit an update to the Maine CDC EMS Clinician and Dispatcher COVID-19 Reporting Tool ([Maine EMS Operational Bulletin No. 2020-04-23-01](#)) within 24 hours. These

reports can be submitted securely through the electronic portal:

<https://gateway.maine.gov/redcap/surveys/?s=PMRK4MKDRC>. You will need the

following information to make the notification:

- The identity of the EMS service organization or Emergency Medical Dispatch Center (EMDC);
- License number of the EMS clinician or emergency medical dispatcher (EMD) for the individual involved; and
- Date of removal from the EMS or EMD workforce.
- Reach out to your established partners to assist with conducting universal swabbing for your agency. If unable to secure swabbing services or additional assistance is needed, reach out to the Maine EMS office for assistance in coordinating universal swabbing. The office can be reached during business hours at 207.626.3860 or after hours at 207.620.6698 (Director's cell phone).
- Contact your organization's leadership and/or the local government to make them aware of the situation.
- Notify all of those previously identified that they have been exposed to a positive COVID-19 patient. It is recommended that all of those who are close contacts (within six (6) feet for at least 15 minutes) be placed on quarantine for 14 days. It should be noted that they will also receive a phone call from the Maine CDC Epidemiological Contact Tracing team.
- Consider the psychological needs of the organization and members by:
 - Engaging Peer Support teams, if available;
 - Contacting the regional CISM team via the Regional Maine EMS Offices or through your organization's structure to provide support;
 - Calling the primary Maine FrontLine WarmLine (207) 221-8196 or Dr. Laurie Cyr-Martel at (207) 240-8913 to arrange for members of the confidential Maine FrontLine WarmLine who has a designated public safety response team to speak directly to all staff (via a virtual staff meeting) regarding the situation. The goal is to communicate effective strategies to increase resiliency and navigating the associated stress.

If the results are negative⁵:

If the individual is symptomatic and has a negative PCR test, it is assumed the current symptoms are the result of another allergen, bacteria, or virus but not SARS-CoV-2. Symptomatic individuals with negative test results should remain in quarantine until 24 hours

⁵ U.S. CDC. Return-to-Work Criteria. (August 10, 2020). Accessed on Sept. 4, 2020 from <https://www.cdc.gov/coronavirus/2019-ncov/hcp/return-to-work.html>

after becoming symptom-free without medications aimed at addressing the symptoms (e.g., cough medicine containing antipyretic agent).

Continued Response – Moving Forward

The ongoing response to a symptomatic and/or a positive COVID-19 co-worker will be traumatic for the entire department and regionalized EMS system. Due to the interconnected nature of EMS and fire departments, there is a strong likelihood that the individual affected does not work for just one organization. It is important to establish a dialogue with Maine EMS as well as the other agencies including those in neighboring states where positive individuals work to mount a comprehensive response to the situation.

Follow-Up Testing

Once it has been established that the department/agency has at least one (1) case of COVID-19, it will be important to begin organizing follow-up testing. As discussed in the first section, the incubation period for COVID-19 is anywhere from two days up to 14 days. Conducting swabbing immediately after identifying a positive COVID-19 case is not intended to determine if others were immediately infected within your organization, it is to determine if you have any other individuals who are asymptomatic and may be the source or an additional source of infection. There will likely be questions asking if the close contacts who test negative can come back to work. Those who are close contacts cannot, because they must wait the maximum incubation period to know if they contracted the virus.

It is important to establish regular follow-up COVID-19 screening in the department/agency to determine if someone was missed as a close contact and was exposed to the virus. More importantly, it is a mechanism to monitor the close contacts to determine if they contracted the virus as well. Maine CDC and Maine EMS recommend that the entire department, including those who are quarantined but without a positive test result, engage in repeat swabbing every seven (7) days. This should be continued until 28 days have passed since the last positive test result.

Maine EMS and Maine CDC can assist in coordinating these swabbing campaigns within the department/agency.

Continuity of Operations Planning

It is important that all agencies/departments consider their continuity of operations plans prior to the incidence of a positive team member. Reestablishing connections with neighboring agencies and departments, as well as making sure that you have up to date contact information for regional contacts. If there are several cases at any single agency/department, this may incapacitate that organization's ability to respond safely. Maine EMS and Maine CDC have

defined some contingency plans within this playbook to serve as stop-gap measures; however, it is important that first responder organizations pre-plan regarding backfilling staffing to ensure safe delivery of services to the community. This may require that agencies reach outside of their local area and/or county and connect with other partners throughout the state. There may be a need to circulate staff from unaffected parts of the state to affected parts in the event of a large outbreak. These conversations ideally should be conducted prior to the incidence of an outbreak. Consider both regional (e.g. Maine EMS Regional Coordinators) and statewide resources (e.g. Maine EMS, Maine Fire Chiefs Association, etc.) to assist in the process.

If the situation requires that the agency/department rely on mutual aid agreements to staff the station and provide continued coverage for the jurisdiction, it's imperative that the individuals working wear at least a surgical mask and eye protection at all times. This will minimize their risk so that when they return home, they will not risk exposing co-workers at their home organization. Additionally, it may be necessary to coordinate through the local emergency management agency to arrange for housing options so that individuals can be brought in from outside areas. Many local emergency management agencies have already established agreement with local hoteliers to provide temporary emergency housing for emergency workers.

Reporting to Maine CDC

As part of the department/agency's continued response to the situation it is important that the organization maintain compliance with the Maine CDC Emergency Rule 10-144 CMR Ch. 124 (Adopted April 22, 2020). Reporting can be accomplished by using the online reporting tool: Maine CDC EMS Clinician and Dispatcher COVID-19 Reporting Tool ([Maine EMS Operational Bulletin No. 2020-04-23-01](#)) within 24 hours. These reports can be submitted securely through the electronic portal: <https://gateway.maine.gov/redcap/surveys/?s=PMRK4MKDRC>. You will need the following information to make the notification:

- The identity of the EMS service organization or Emergency Medical Dispatch Center (EMDC);
- License number of the EMS clinician or emergency medical dispatcher (EMD) for the individual involved; and
- Date of removal from the EMS or EMD workforce.

It is important to maintain consistent and timely reporting because this allows Maine EMS and Maine CDC to have better insight into the number of licensed EMS clinicians and EMD professionals there are who are out of work. As an example, there may be one EMS clinician who works at three agencies. If it is reported that Service A, Service B, and Service C have one (1) clinician quarantined, then it will appear to Maine EMS and Maine CDC that it is three (3) different people; however, in reality it is one (1) person who just so happens to work for all

three (3) services. The intention is for all agencies to report if they have an individual who is out of service, as it provides a more complete dataset. Maine EMS and the data coordinator team are able to remove duplicates and create visualizations and reports based on the information that comes out of the system.

Bringing People Back to Work after a Positive COVID-19 Test⁶

It is important to work closely with Maine CDC and Maine EMS on bringing staff members back to work. There is extensive guidance published on the U.S. CDC website as well as the Maine EMS website regarding going back to work. All individuals who are close contacts/exposures should remain out of work for 14 days following the last known exposure (Appendix A). That said, there may be specific situations that require that the individual return to work in order to maintain continuity of operations – this will be discussed in the [Contingencies](#) section.

Individuals who test positive for COVID-19 should work closely with the Maine CDC contact tracing team, who will assist in providing guidance on returning to work based on their signs, symptoms, and pre-existing conditions. Refer to the Maine EMS document “EMS Clinician Return-to-Work Guidance After Positive COVID-19 Test” document in the Appendix (Appendix B). The U.S. CDC only recommends the symptom-based strategy for determining when healthcare professionals can return to work as individuals. Repeat testing of individuals with COVID-19 may detect trace remnants of the virus RNA for weeks following recovery, but that does not indicate infectiousness. After 10 days, individuals are unable to spread infectious virus. Repeat testing individuals who are positive is not recommended for 90 days after first positive test.

The following is the text version of the flowchart that is in the Appendix document. This discusses return to work guidance for those individuals who have received a positive COVID-19 test. Definitions of the relevant terms can be found in [Definitions](#).

EMS clinicians, Firefighters and Other First Responders who are Asymptomatic

If the EMS clinicians, firefighters or other first responder is not severely immunocompromised and were asymptomatic throughout their infection, they may return to work when at least 10 days have passed since the date of their first positive viral diagnostic test (this excludes any antibody tests).

⁶ U.S. CDC. Return-to-Work Criteria. (Aug. 10, 2020). Accessed on Sept. 7, 2020 from <https://www.cdc.gov/coronavirus/2019-ncov/hcp/return-to-work.html#definitions>

EMS clinicians, Firefighters and Other First Responders with Mild to Moderate COVID-19 Disease

For those EMS clinicians, firefighters or other first responders who are not severely immunocompromised, they must meet the following requirements before they can return to work:

- At least 10 days have passed since the symptoms first appeared; **AND**
- At least 24 hours have passed since last fever without the use of fever-reducing medications; **AND**
- Symptoms (e.g. cough, shortness of breath, etc.) have improved.

EMS clinicians, Firefighters and Other First Responders with Severe to Critical Illness or Those Who Are Severely Immunocompromised

For those EMS clinicians, firefighters or other first responders who were affected by severe to critical illness or are severely immunocompromised, they must meet the following requirements before they can return to work:

- At least 20 days have passed since symptoms first appeared; **AND**
- At least 24 hours have passed since last fever without the use of fever-reducing medications; **AND**
- Symptoms (e.g. cough, shortness of breath, etc.) have improved; **AND**
- Received consultation with infection control experts (i.e. discussion with Maine CDC contact tracing team regarding return to work).

After Returning to Work from a Positive COVID-19 Experience

After returning to work, EMS clinicians, firefighters and other first responders must:

- Wear a facemask at all times, at least, until all symptoms are completely resolved or at baseline. A facemask instead of a cloth face covering should be used by these EMS clinicians, firefighters and other first responders during this time period. After this period, they should revert to the department/agency's policy regarding PPE that is being used during the pandemic. A facemask does NOT replace the need to wear an N95 (equivalent or higher) respirator or other PPE when indicated, including when caring for patients with suspected or confirmed COVID-19.
- Monitor for symptoms and seek re-evaluation if symptoms reoccur or worsen.

Definitions of Return-to-Work Terms

Mild Illness: Individuals who have any of the various signs and symptoms of COVID 19 (e.g., fever, cough, sore throat, malaise, headache, muscle pain) without shortness of breath, dyspnea, or abnormal chest imaging.

Moderate Illness: Individuals who have evidence of lower respiratory disease by clinical assessment or imaging and a saturation of oxygen (SpO_2) $\geq 94\%$ on room air at sea level.

Severe Illness: Individuals who have respiratory frequency >30 breaths per minute, $\text{SpO}_2 < 94\%$ on room air at sea level (or, for patients with chronic hypoxemia, a decrease from baseline of $>3\%$), ratio of arterial partial pressure of oxygen to fraction of inspired oxygen ($\text{PaO}_2/\text{FiO}_2$) $<300 \text{ mmHg}$, or lung infiltrates $>50\%$.

Critical Illness: Individuals who have respiratory failure, septic shock, and/or multiple organ dysfunction.

Severely immunocompromised: For the purposes of this guidance, the U.S. CDC definition is used:

- Some conditions, such as being on chemotherapy for cancer, being within one year out from receiving a hematopoietic stem cell or solid organ transplant, untreated HIV infection with CD4 T lymphocyte count < 200 , combined primary immunodeficiency disorder, and receipt of prednisone $>20\text{mg}/\text{day}$ for more than 14 days, may cause a higher degree of immunocompromise and require actions such as lengthening the duration of HCP work restrictions.
- Other factors, such as advanced age, diabetes mellitus, or end-stage renal disease, may pose a much lower degree of immunocompromise and not clearly affect occupational health actions to prevent disease transmission.
- Ultimately, the degree of immunocompromise for HCP is determined by the treating provider, and preventive actions are tailored to each individual and situation.

Contingencies

It is important to first attempt to address concerns utilizing existing continuity of operations plans and working collaboratively with mutual aid partners throughout your local area, region, and ultimately throughout the state. That said, there may be situations where it requires departments/agencies to use contingency plans developed for specific crisis situations. One key situation that may require a contingency or crisis standard is related to staffing. It is the recommendation of Maine EMS and Maine CDC that organizations make every attempt to avoid these situations including utilizing mutual aid; however, these standards have been utilized as part of the ongoing response in the State of Maine and so it is important to go over their use and indications.

Staffing

If the department or service would no longer be able to continue providing essential 911 services to their constituents due to the number of individuals affected by quarantine, some of those individuals may be eligible to return-to-work only and then must immediately resume quarantine before and after work shifts.

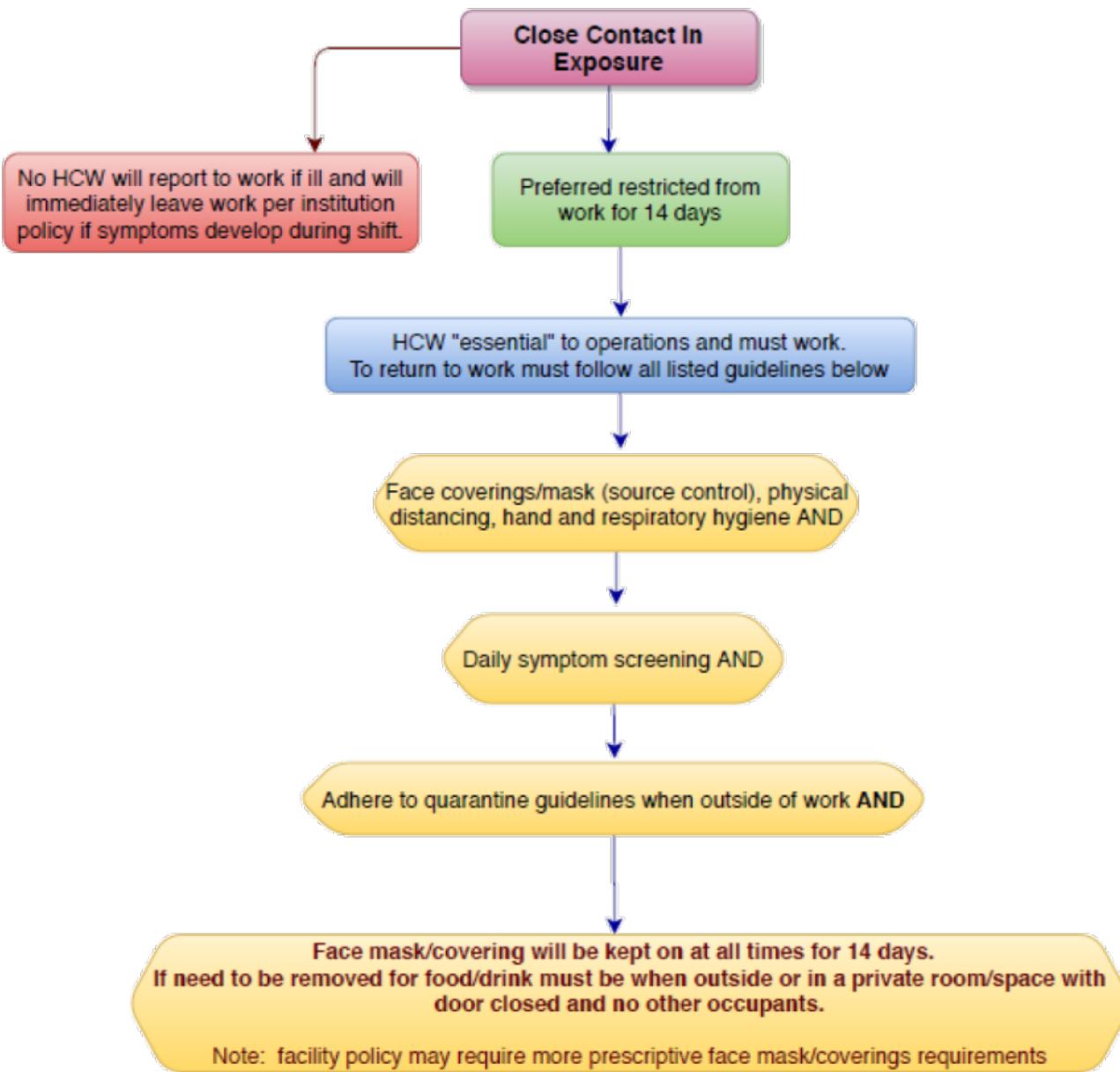
If this situation does occur, it is important to discuss this with Maine EMS when you notify them of the positive case(s) or during a regular status update to Maine EMS. In the event of a staffing shortfall, you may bring back individuals from quarantine if they meet the following criteria (Appendix B):

- No signs or symptoms consistent with COVID-19; **AND**
- Negative COVID-19 test (optional, but strongly recommended); **AND**
- The individual agrees to be fully masked at all times during their entire shift for 14 days. This means that they will need to wear a surgical mask or face covering when they are in any other space aside from their personal/individual quarters where they are sleeping. Additionally, they must not eat with their co-workers as they would not be wearing PPE during this time; **AND**
- The individual agrees to remain diligent about physical distance as well as hand and respiratory hygiene.

Appendices



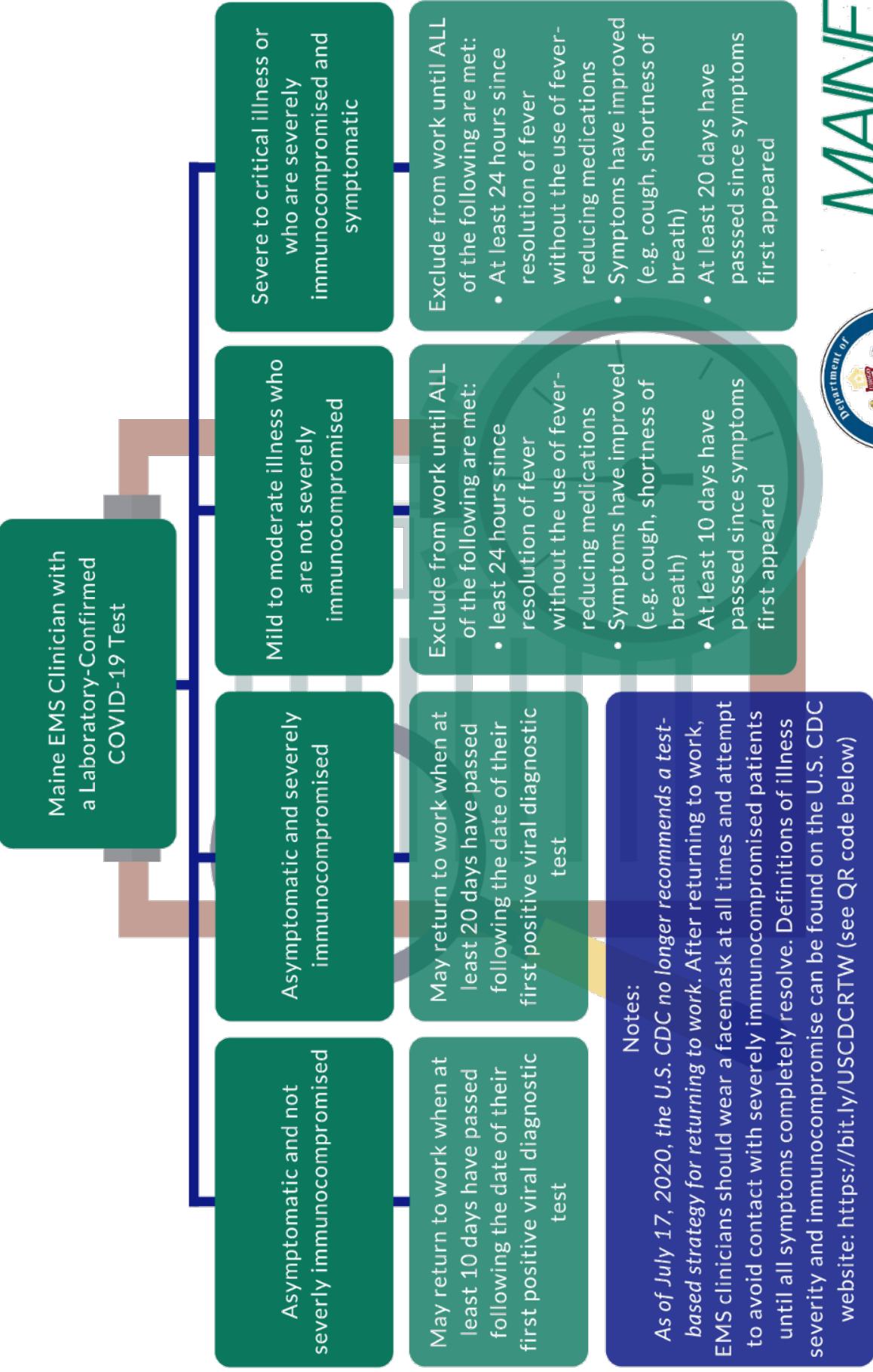
Work Restriction(s) Decision Tree for Healthcare Workers Who Have Been Exposed to COVID-19



Definitions:

- **Close Contact:** person not wearing appropriate personal protective equipment who had contact with a positive COVID-19 person within 6 feet for a cumulative time of 15 min or more.
- **Physical Distancing:** keeping at least 6 feet from other people who are not from your household in both indoor and outdoor spaces.
- **Source Control:** refers to use of face coverings to cover mouth and nose to prevent the spread of respiratory secretions when talking, sneezing, or coughing.

EMS Clinician Return to Work Guidance After Positive COVID-19 Test (Updated July 29, 2020)



Notes:

As of July 17, 2020, the U.S. CDC no longer recommends a test-based strategy for returning to work. After returning to work, EMS clinicians should wear a facemask at all times and attempt to avoid contact with severely immunocompromised patients until all symptoms completely resolve. Definitions of illness severity and immunocompromise can be found on the U.S. CDC website: <https://bit.ly/USCDCRTW> (see QR code below)

For More Information:

Note: Interim guidance and is subject to change. Information current as of July 29, 2020

